



## **INTERNATIONAL CONFERENCE**

**On**

### **Recent Challenges in “Mechanical, Material, Textile, Mining, Aerospace and Nano-Technology” (MTMANT-2018)**

**Organized by**

**“Krishi Sanskriti”**

**On**

**22<sup>nd</sup> September, 2018**

**Venue:**

**Jawaharlal Nehru University,  
New Delhi-110067**

#### **Call for Papers and Conference Themes**

The Organizers cordially invites Abstracts and Full Research Papers for oral/poster presentation from all over the world to participate/present and publish their research papers in the **International Conference on Recent Challenges in “Mechanical, Material, Textile, Mining, Aerospace and Nano-Technology”(MTMANT-2018)** on the following scientific areas for presentations and discussions thereafter.

These technological subjects are emerging and promising discipline in shaping future research and development activities in both Academia and Industry. The conference aims at providing an opportunity for exchange of ideas and dissemination of knowledge among Academia, Industry, Research Scholars, Scientists, Entrepreneurs and N.G.O. for sustainable growth of the society. Contributions are invited from prospective authors from related areas. All contribution should be of high quality, Original and not published elsewhere or submitted for publication. During the review period, Papers will be reviewed by eminent scholars in the respective areas. **All selected papers will be published in International Journal having ISSN in print version as well as online version and that will be likely to be released on the day of conference.**

**Topics of interest for submission include, but are not limited to:**

#### **Mechanical Properties of Materials**

- Advanced Characterization
- Biological Materials
- Bulk Crystal Growth
- Computational Materials Science
- Corrosion and Environmental Effects
- Defects and Devices
- Electrochemistry
- Electronic Materials
- Electronic, Optical, and Magnetic Properties
- Materials for Energy and Environmental Applications
- Materials Theory and Processing

- Organic Polymer Materials
- Phase Transformations
- Self Assembly
- Shape Deposition Manufacturing
- Surfaces, Interfaces, and Thin Films
- Thin-Film Deposition
- Transport Properties

#### **Textile Engineering**

- Advancements in yarn and fabric manufacturing
- Advancements in coloration and finishing
- Recent developments in apparel manufacturing
- Textile Composite Materials
- Developments in textile machinery
- Sustainability, environment and clean technologies
- Water and energy conservation in textile industry
- Protective, medical and geo-textiles
- Recycling in textiles
- Use of nano and biotechnologies in textiles
- Modelling and simulation in textiles
- Productivity and quality management in textile manufacturing processes
- 3D Textiles Mining Engineering
- Advanced Mine Planning
- Advanced Mine Ventilation
- Application of Artificial Intelligence in Mining
- Automation and Remote Control of Mining
- Coal Mines Regulations and Metalliferous Mines Regulation
- Computer Applications in Mining
- Development of Mining Legislations in India
- Evaluation of drilling and blasting methods for underground and surface mines
- Explosives. Initiation systems and accessories for blasting in the underground mines
- Fundamentals of drilling technology
- Fundamentals of rock mechanics instrumentation
- Ground Control Instrumentation
- Latest Mine Machinery
- Mine Fires and Disasters
- Mine Fires and spontaneous heating
- Mine planning
- Mine Pumps
- Mining Induced Subsidence Engineering

Mining of Deep Seated Deposits  
Mining Under Difficult Geological Situations  
Modern Design of Mine Opening  
Operations Research in Mining  
Principles of blast round design for single and multi-row  
Provisions of Mines Act and Mines rules  
Rock Drivage Machines  
Rock Excavation Engineering

### **New Materials and Advanced Materials**

- Non-ferrous Metal material
- Iron and Steel
- Composites
- Optical/Electronic/Magnetic Materials
- New Functional Materials
- Building Materials
- New Energy Materials
- Environmental Friendly Materials
- Earthquake Materials and Design
- Biomaterials
- Smart/Intelligent Materials/Intelligent Systems
- Polymeric Materials
- Mechanical Behavior & Fracture

### **Production and Mechanical Engineering**

- Acoustics and Noise Control
- Advanced and Digital Manufacturing
- Advanced Materials
- Applied Mechanics
- Ballistics
- Bioengineering and Biomedical Engineering
- Biomechanics
- Composite and Smart Materials
- Compressible Flows
- Computational Mechanics and Techniques
- Dynamics and Vibration
- Engineering Systems Design and Analysis
- Fluid Mechanics and Machinery
- Fluids Engineering
- Fuels and Combustion
- Heat and Mass Transfer
- Instrumentation and Control
- Internal Combustion Engines
- Manufacturing and Production Processes
- Mechanical Power Engineering
- Multibody Dynamics
- Naval Architecture and Engineering of Marine Systems
- New and Renewable Energy
- Noise and Vibration
- Nonlinear Dynamics
- Plasticity Mechanics
- Pollution and Environmental Engineering

- Precision mechanics, mechatronics
- Production Technology
- Quality assurance and environment protection
- Resistance and Propulsion
- Structural Dynamics

### **Manufacturing Processes and Systems**

- Surface Engineering/Coatings
- Materials Forming and Machining
- Powder Metallurgy
- Severe Plastic Deformation
- Tribology in Manufacturing Processes
- Theory and Application of Friction and Wear
- Casting and solidification
- Microwave Processing of Materials
- Waste-to-Energy, Waste Management and Waste Disposal
- Thermal Engineering Theory and Applications
- Rapid Prototyping, Manufacturing, and Tooling
- E-manufacturing, ERP, and Integrated Factory
- Sequencing, and Scheduling
- Virtual Manufacturing, and Simulation
- Operations, and Production Management
- Precision Engineering, and Concurrent Engineering
- DSS, ES and AI in Manufacturing
- Engineering Optimization

### **Manufacturing Engineering**

- Advanced Design, Production Processes and Devices
- Design of Machines and its Applications
- Engineering Design Methodology and Design Models
- Magnetic Storage System
- Miniaturization of Molding and Casting Processes
- Modeling and Simulation of Manufacturing Processes
- Non-conventional Processing
- Printing Technology for Manufacturing
- Rapid Prototyping and Tooling Rheology
- Solid Freeform Fabrication for Biomedical and Tissue Engineering
- Sustainable Tribology/ Tribology in Manufacturing/ Maintenance Tribology
- Transmission

### **Aerospace Engineering(Aeronautical and Astronautical)**

- Advanced In-Space Propulsion & Power Concepts
- Aero elasticity and Space faring
- Aeroacoustics
- Aerospace Defense Systems
- Aerospace Propulsion Systems
- Aerospace Structures and Materials
- Affordable launch systems and developing countries
- Aircraft Design and Technology
- Aircraft Fuel System, Guidance and Control

- Atmospheric Flight Dynamics
- Avionics Engineering
- CFD and FEA
- Communication Systems and Technologies
- Computational Fluids Dynamics
- Design and construction of space systems, simulation and testing
- Developments in global positioning, interoperability, new applications, vehicle control
- Developments in new space communication techniques, higher frequencies and bandwidths
- Energy from Space
- Flight and Space Mechanics
- Flight Dynamics, Control and Performance
- High Frequency Gravity Wave Generation Detection,
- Industrial Aerodynamics
- Liquid Propellant Rockets
- Lunar Lander Technologies and Design
- Multidisciplinary design Optimization
- Navigation, Guidance and Control
- Near- Earth Space Physics
- Neuro-Fuzzy Control
- Satellite Technologies
- Scientific applications, near Earth space, deep space, microgravity sciences
- Small satellites, micro, nano and pico satellites, cubesat developments
- Space law, space medicine, and social, educational and other benefits of space
- Space Mission and Spacecraft Subsystems
- Space robotics
- Space technology utilization for development and societal well being
- Space weather
- Spacecraft Communication Technique
- Spacecraft Design and Technology
- Spacecraft Software Development and Modeling
- Turbomachinery
- Unmanned Air Vehicle
- Wind Tunnel Design and Testing

#### **Nanotechnology: Fundamentals and Applications**

- Biomimetics
- Computational nanoscience and nanotechnology
- Engineering of Biointerfaces
- Layered and composite nanostructures
- Low-dimensional systems
- Mechanical Properties and Nanomechanics
- MEMS and Nano Technology
- Modeling and Simulation
- Multifunctional nanomaterials
- Nano manufacturing Processes and Systems
- Nanobiomechanics

- Nanobiotechnologies
- Nanocatalysis
- Nanoelectronics and information technology
- Nano-Graphene
- Nanomaterial Engineering
- Nanomaterials, Nanodevices: Fabrication, Characterization and Application
- Nanomedical Applications: Drug Delivery, and Tissue Engineering
- Nanopatterning
- Applications of Nanotechnology in Agriculture, Coating, Education, Energy, Environment, Polymer etc.
- Nanotechnology, Products and Markets
- Societal aspects of Nanotechnology: Ethics, Risk Assessment, Standardization

#### **Nanomaterials, Functional Porous Materials, Co-ordination Networks, Bio-inspired Nanomaterials, Hybrid Materials and Living Materials:**

- Nanostructures and Nanoparticles
- Nanotubes and Ceramics
- Membranes and Films
- Supramolecular systems
- Co-ordination polymers
- Zeolites and MOFs
- Mesoporous materials
- Hierarchically structured materials
- Carbons and Natural Materials
- Bioinspired and biomimetic materials
- Biomineralisation and biotemplating
- Bio-integrated materials
- Biocomposites and Organometallics
- Green materials for construction
- Inorganic switches

#### **Abstract Submission:**

Abstracts not exceeding 300 words on any of the aforesaid themes should be sent to the Organizing Secretary through email at [conference.mechanical@gmail.com](mailto:conference.mechanical@gmail.com) on or before **17<sup>th</sup> September, 2018**.

#### **Submission of Full Length Research Paper & Copyright Form**

Full length research paper, maximum in 6 pages and copyright form should be submitted together as separate attachment latest by **18<sup>th</sup> September, 2018** through email at - [conference.mechanical@gmail.com](mailto:conference.mechanical@gmail.com)

#### **Submission of Registration Details:**

Submission of Registration Form/Details: **19<sup>th</sup> September, 2018**. Registration process can be initiated after receiving acceptance letter of full paper.

#### **Accommodation**

Free one day Accommodation will be available to the limited no. of out station non N.C.R. Delegates at JNU guest house and nearby other guest houses/hotels around conference venue. The Tariff rate for next day and subsequent day accommodation is as follows: Double-bed Room @ Rs.800/- per person (Indian

non N.C.R. delegates) and 35 USD for Foreign delegates on sharing basis per day (check out time noon to noon).

To and fro transportation facility from guest house to the conference Venue will be provided by the organizer.

**NOTE:** In case Research article is accepted by the editorial committee it will be published and released on the day of conference in case the delegates are not able to physically present their paper due to some or other reason his/her research paper will be published (in absentia) and published copy along with certificate will be dispatched to his/her correspondence address by post just after the conference at no extra cost. **All communication should be by e-mail/online only (no hard copy is required to be posted).**

### Registration

The participants are requested to register by sending the duly filled Registration form through e-mail along with their research paper and registration fees (**through RTGS/ Wired Transfer or Online Transfer**)

**Bank Details mentioned below for RTGS/ Wired Transfer or Online Transfer:**

**Beneficiary Name : Krishi Sanskriti**

**Bank Name : Canara Bank**

**Bank Address : Jeet Singh Marg, New Delhi**

**Account No. : 1484101026988**

**Account Type : Savings**

**IFSC Code : CNRB0001484**

**Swift Code- : CNRBINBBID**

### **Registration Charges:**

Categories	Indian Delegates	SAARC/ African Country Delegates	Rest of the countries
Academic faculty/ Industrial Delegates	3000 INR	125 USD	250 USD
Research Scholars(Ph.D) / NGO Representative	2500 INR	100 USD	200 USD
Students(UG and PG)	2000 INR	75USD	150 USD
Printing of Additional Pages as chapter in edited book/proceeding /in Journals	300 INR	15 USD	20 USD
Listener / Accompanying Member (only Indian Delegates)	1000 INR	**	**
Print copy of research article as chapter in edited book/proceeding/Journal & Certificate (additional copy) for Co-Authors (if required in absentia)	700 INR	20 USD	30 USD
Only Print copy of research article as chapter in edited book/proceeding /Journal (additional copy) for Co-Authors (if required in absentia)	500 INR	15 USD	25 USD

Only Certificates (Co-Authors in absentia)	300 INR	10 USD	20 USD
Additional Research paper for same authors	1000 INR	25 USD	35 USD

**\*\*Foreign Participants as listener are not allowed, only authors from foreign country/countries will be allowed in this conference.**

### **Mandatory steps to be followed:-**

1. In case of multi authored research paper, at least one Registration is mandatory.
2. In case other author/co-author wish to physically attend the conference they need to pay full Registration fees individually, separate Journal & Certificate along with the conference kit will be issued to them. Co- Authors are requested to fill & submit separate Registration forms in case they are physically attending the conference.
3. Charges for extra copy of Journal/ Certificate for other Co-author (if required) should be paid along with preliminary Registration by the corresponding author.
4. Co-Authors will not be considered as accompanying person. Listeners are not entitled for free accommodation (it will be on paid basis). However they will be issued conference kit and participation certificate.
5. All Selected papers will be available online after 15 to 20 days of conference date over, in order to download the papers the authors need to go in the publication section of Krishi Sanskriti website.

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**For further information visit our Website**  
<http://krishisanskriti.org/22mtmant.html>

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